



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
[www.uspto.gov](http://www.uspto.gov)

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.	
09/901,317	07/09/2001	Alexandros Biliris	2000-0280-CON	9040	
7590	04/07/2008		EXAMINER		
Mr. S H Dworetsky AT&T CORP. Room 2A-207 One AT&T Way Bedminster, NJ 07921		JEAN GILLES, JUDE			
		ART UNIT	PAPER NUMBER	2143	
		MAIL DATE	DELIVERY MODE	04/07/2008 PAPER	

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	09/901,317	BILIRIS ET AL.	
	<b>Examiner</b>	<b>Art Unit</b>	
	JUDE J. JEAN GILLES	2143	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

1) Responsive to communication(s) filed on 04 January 2008.  
 2a) This action is FINAL.                    2b) This action is non-final.  
 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

4) Claim(s) 3,4,7-18,25,27 and 28 is/are pending in the application.  
 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.  
 5) Claim(s) \_\_\_\_\_ is/are allowed.  
 6) Claim(s) 3,4,7-18,25,27, and 28 is/are rejected.  
 7) Claim(s) \_\_\_\_\_ is/are objected to.  
 8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

9) The specification is objected to by the Examiner.  
 10) The drawing(s) filed on \_\_\_\_\_ is/are: a) accepted or b) objected to by the Examiner.  
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  
 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
 a) All    b) Some \* c) None of:  
 1. Certified copies of the priority documents have been received.  
 2. Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)	4) <input type="checkbox"/> Interview Summary (PTO-413)
2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)	Paper No(s)/Mail Date. _____ .
3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)	5) <input type="checkbox"/> Notice of Informal Patent Application
Paper No(s)/Mail Date _____.	6) <input type="checkbox"/> Other: _____ .

## **DETAILED ACTION**

### ***Continued Examination Under 37 CFR 1.114***

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 12/04/2007 has been entered.

### ***Claim Objections***

2. Claims 7-10 are objected to because of the following informalities. Claims 7-10 improperly depend on cancelled claim 6. In order to proceed with prosecution the Examiner assumes claims 7-10 depend on independent claim 3. Appropriate correction is required.

### ***Claim Rejections - 35 USC § 103***

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

4. Claims 3, 4, 7-18, 25, and 27-28 remain pending are rejected under 35 U.S.C. 103(a) as being unpatentable over Dutta U.S. patent No. 6,772,208 in view of Narendran et al (Narendran) U.S. 6,070,191.

**Regarding claim 3:** Dutta teaches the invention substantially as claimed. Dutta teaches a method of serving content in a packet-switched network comprising:

choosing from a plurality of content distribution networks which content distribution network will respond to a content request from a client (*fig. 4A; column 8, lines 47-60*);

redirecting the client to the chosen content distribution network so that the content request will be served by the chosen content distribution network (*column 2, lines 63-67, continue lines 1-18 of column 3*),

wherein the content to be served by the chosen content distribution network comprises content pointed to by a pointer embedded in a document and redirecting the client to the chosen, content distribution network further comprises rewriting the pointer before serving the content to the client (*column 4, lines 52-67, continue in lines 1-9 of column 5; column 8, lines 15-60*) and

Although Dutta teaches the features above, Dutta does not disclose the details of "...a content distribution networks that does not exceed a predetermined capacity reserved on the one of the plurality of content distribution networks". Nonetheless this feature is well known and would have been obvious modification to the system shown by Dutta as evidenced by Narendran.

In the same field of Endeavor, Narendran teaches "...Thus, the documents are distributed such that the load on each server is proportional to its capacity in terms of the maximum number of HTTP connections that it can support simultaneously..."[see Narendran; column 5, lines 30-46] and further discloses "...Unlike the previous two examples, in this case the solution is able to achieve only "approximate" load balance. The flow from server S.sub.3 to the sink, which specifies the load on S.sub.3, is 0.61, which is 0.14 less than its capacity. This load has been diverted to S.sub.1 as extra load as shown on the redundant arc between S.sub.1 and the sink. Thus, the load on S.sub.1 is now 0.34..." ..."[see Narendran; column 14, lines 20-48].

Accordingly, it would have been obvious to one of ordinary skill in the networking art at the time the invention was made to have incorporated Narendra's teachings of choosing a Content Distribution only if a measured load of the one of the plurality of content distribution networks does not exceed a predetermined capacity reserved with the teachings of Dutta. This combination will provide the ability of a content producer to determine the content distributor that lead a client to the content producer's site and should provide content producers with an efficient way to negotiate payment or other terms from content distributors before the privilege of hyperlinking is allowed (see Dutta, Column 3, lines 3-7), thereby ensuring that the load is properly balances across N document servers (see Narendran, Summary). By this rationale, claim 3 is rejected.

**Regarding claim 4:** the combination Dutta-Narendra teaches the method of claim 3 wherein the content distribution network is chosen based, at least partly,

determination of which of the plurality of the content distribution networks is close to the client (see Narendra, column 2, lines 40-53).

**Regarding claim 7:** The combination Dutta-Narendra teaches the method of claim 6 wherein the pointer to the embedded content is rewritten to point to a server in the chosen content distribution network [see *Dutta, fig. 4A*; column 4, lines 52-67, continue in lines 1-9 of column 5; column 8, lines 15-60].

**Regarding claim 8:** The combination Dutta-Narendra teaches the method of claim 6 wherein the pointer to the embedded content is rewritten to point to a domain name served by the content distribution network [see *Dutta, fig. 4A*; column 4, lines 52-67, continue in lines 1-9 of column 5; column 8, lines 15-60].

**Regarding claim 9:** The combination Dutta-Narendra teaches teach the method of claim 6 wherein the pointer to the embedded content is rewritten so that an original reference may be readily parsed from a corresponding one of the rewritten reference (see *Dutta, fig. 4A*; column 4, lines 52-67, continue in lines 1-9 of column 5; column 8, lines 15-60).

**Regarding claim 10:** The combination Dutta-Narendra teaches the method of claim 9 wherein the chosen content distribution network utilizes the corresponding one of the rewritten references to obtain the embedded content if the chosen content distribution network does not have an up-to-date copy of the embedded content in a cache (see Narendra; *column 4, lines 16-40*).

**Regarding claim 11:** The combination Dutta-Narendra teaches the method of claim 3 wherein the step of redirecting the client to the chosen content distribution network

further comprises resolving domain name system queries resolve to content served by the chosen content distribution network [see Dutta; column 4, lines 52-67, continue in lines 1-9 of column 5; column 8, lines 15-60].

**Regarding claim 12** The combination Dutta-Narendra teaches the method of claim 11 further comprising answering the domain name system queries are answered with a network address of content served by the chosen content distribution network [see Dutta; column 4, lines 52-67, continue in lines 1-9 of column 5; column 8, lines 15-60].

**Regarding claim 13:** The combination Dutta-Narendra teaches the method of claim 11 comprising answering the domain name system queries with a network address of a domain name system server responsible for the chosen content distribution network [see Dutta; column 4, lines 52-67, continue in lines 1-9 of column 5; column 8, lines 15-60].

**Regarding claim 14:** The combination Dutta-Narendra teaches the method of claim 11 comprising answering the domain name system queries are answered with a domain name of content served by the chosen content distribution network (see Narendra; *column 4, lines 1-15*).

**Regarding claim 15:** The combination Dutta-Narendra teaches the method of claim 11 comprising forwarding the domain name system queries to a domain name server responsible for the chosen content distribution network and which directly answers the domain name system queries (see Narendra; *column 4, lines 1-15*).

**Regarding claim 16:** The combination Dutta-Narendra teaches the method of claim 3 wherein the content distribution network serves the content request from a local cache and wherein the content distribution network has access to a second copy of the content if there is a cache miss (see Narendra; *column 4, lines 17-40*).

**Regarding claim 17:** The combination Dutta-Narendra teaches the content distribution method of claim 16 wherein the content distribution network includes a table of associations between references to content served by the content distribution network and references to a second copy of the content served from elsewhere in the network [see Dutta; column 4, lines 52-67, continue in lines 1-9 of column 5; column 8, lines 15-60].

**Regarding claim 18:** The combination Dutta-Narendra teaches the method of claim 16 wherein the content distribution network can transform references to content served by the content distribution network into second references to a second copy of the content served from elsewhere in the network (see Narendra; *column 4, lines 16-40*).

**Regarding claim 25:** The combination Dutta-Narendra teaches a system comprising:  
means for choosing a content distribution network from a plurality of content distribution networks for responding to a content request from a clients (*column 2, lines 63-67, continue lines 1-18 of column 3*); and  
means for redirecting the client to the chosen content distribution network so

that the content request will be served by the chosen content distribution network (see Joffe; *column 13, lines 31-46*), wherein the content to be served by the chosen content distribution network comprises content pointed to by a pointer embedded in a document and redirecting the client to the chosen, content distribution network further comprises rewriting the pointer before serving the content to the client (*column 4, lines 52-67*, continue in lines 1-9 of column 5; *column 8, lines 15-60*) and

wherein

the means for choosing a content. distribution network from a plurality of content distribution networks for responding to a content request from a client is configured to choose a content distribution network only if a measured load of the content distribution network does not exceed a predetermined capacity reserved on the content distribution network [see Narendra; *fig. 3; column 5, lines 30-46; column 14, lines 20-48; column 3, lines 1-23*]

**Regarding claim 27:** The combination Dutta-Narendra teaches the system of claim 25, further comprising:

means for serving content from a local cache (see Dutta, *column 2, lines 63-67, continue lines 1-18 of column 3*); and

means for serving content from a second copy of the content when the means for serving content from a local cache experiences a cache miss see Narendra; *fig. 3; column 5, lines 30-46; column 14, lines 20-48; column 3, lines 1-23*].

**Regarding claim 28:** The combination Dutta-Narendra teaches the system of claim 27, further comprising:

means for transforming references to content served by the content distribution network into second references to the second copy of the content served from elsewhere in the network see Narendra; *fig. 3*; column 5, lines 30-46; column 14, lines 20-48; column 3, lines 1-23]

### ***Conclusion***

5. ***This action is made Non-Final.*** Any inquiry concerning this communication or earlier communications from examiner should be directed to Jude Jean-Gilles whose telephone number is (571) 272-3914. The examiner can normally be reached on Monday-Thursday and every other Friday from 8:00 AM to 5:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nathan Flynn, can be reached on (571) 272-1915. The fax phone number for the organization where this application or proceeding is assigned is (571) 273-3301.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (571) 272-0800.

/Jude J Jean-Gilles/

Primary Examiner, Art Unit 2143

March 28, 2008